

Tone Brothers

CASE
SUMMARY

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TONE BROTHERS, INC.

Ankeny, Iowa
Polk County

Intern: Jennifer Reutzel
Major: Environmental Economics Grad Studer
School: Iowa State University



The Company

Tone Brothers, Inc. is a spice manufacturing company located in Ankeny, Iowa and is the largest manufacturing facility of its kind in the world. They have been owned by Burns Philp Food Inc., a conglomerate based out of Sydney, Australia, since 1994. Tone's produces virtually all kinds of dry spices and seasonings at their Ankeny facility under both their own Tone's brand name as well as others including Spice Islands, Durkee, French's, Dec-A-Cake and other private label brands.

Project Background

Tone's, through its regular spice production process, generates waste spice referred to as spice dust. Although the material is obviously food grade, because of the ultra-fine consistency of the material it has always presented a handling/disposal problem. Finding a suitable outlet for this material was the original goal of the project; however, through this project, opportunities arose to do a complete overhaul of all plant wastestreams. The ultimate goal of the summer became to divert as many landfill wastestreams as possible, pushing Tone's close to becoming a "zero waste" facility.

Incentives to Change

Tone's desired to reduce the quantity of materials they landfilled by finding alternative outlets for many of their wastestreams. Through this they hoped to be able to reduce operating costs and generate increased commitment to environmentally friendly production practices at their facility.

Results

Waste spice is collected through an internal dust collection system and blown out to large nylon bulk bags contained within roll-off canisters located on 2 sides of the facility. The bags of dust were originally being landfilled. After researching various options, the dust will now be blown directly into two 53' trailers and hauled to a food waste processing facility in Minnesota for incorporation into animal feed. This will be done at less than half the current disposal cost, keep an estimated 130 tons/yr. of material from being landfilled, and generate a savings to Tone's of around \$10,000/yr.



Packaged products that have passed their shelf life while in the warehouse previously used to be

thrown in the compactors bound for the landfill. The benefits of finding an alternative outlet not only made the disposal of the products more environmentally friendly, but it also provided Tone's with secure destruction point of their product. The food waste processor being utilized for the spice dust will be taking these materials as well. Although there will be cost savings associated with the expired product, the compost will be an added fee. Overall, Tone's will still come out with cost savings and save an additional estimated 50 tons of material from going to the landfill each year.



Through work on other projects it became apparent that Tone's could greatly benefit from a plant-wide recycling program. In the course of working with a local industrial recycler, Tone's was able to recover nearly every wastestream generated both through production and general office waste. The program's success will result in a diversion of nearly 800 tons of waste material from the landfill every year and revenue/cost savings of \$115,000/yr.

In order to ensure the amount of product in the bottles meet label weight, nearly all packaging lines at Tone's are equipped with checkweighers to monitor bottle weight. In addition to aiding in meeting label weights, these checkweighers help reduce the amount of overflow scrap spice loss. One of the few lines that did not have this equipment was also the line with the highest scrap rate. Installation of a checkweigher on this line and subsequent updates to line equipment could drastically improve filling performance. Potential spice recovery could be as much as 45,000 lbs./yr., at an estimated savings of nearly \$45,000 each year.

GOVERNMENT

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